



Loureiro Engineering Associates, Inc.

June 21, 2001

**State of Connecticut  
Department of Environmental Protection  
Bureau of Water Management  
Permitting, Enforcement & Remediation Division  
79 Elm Street  
Hartford, CT 06106**

*Pratt & Whitney  
CTD990672081  
R-9  
R-9 = 100*



RDMS DocID 00100255

Attn.: Mr. Richard C. Hathaway, Jr.

**RE: November 2000, Revised May 2001  
Remedial Action Work Plan  
Willow Brook and Willow Brook Pond  
Response to DEP Comments**

Dear Mr. Hathaway:

Loureiro Engineering Associates, Inc. (LEA) has prepared this letter on behalf of our client, United Technologies Corporation, Pratt & Whitney Division (UTC/P&W), to provide responses to the comments raised on June 8, 2001 in regards to the above-referenced document. This letter is formatted to provide the topic of each comment followed by the response to the comment in *italics*.

**Energy Dissipator/Cap Construction Integration**

*Partial bypass of the channel during construction of the energy dissipator will be necessary. This bypass would be accomplished by installing temporary sandbag (or other appropriate material) dams to create protected work cells within the brook bed and adjacent areas to facilitate the riprap cap and dissipator section construction.*

*The energy dissipator is to be provided with 27-inches of modified riprap and the channel section is to be provided with at least 24-inches of modified riprap. The dissipator will be reconfigured at project completion by simply adding or removing riprap to conform to the channel design desired. An artifact of this will be that the riprap protection layer of the cap within the energy dissipator area may be thicker than is required for the channel section.*

*The expected sequence of operations associated with construction of the energy dissipator are as follows:*

- 1. Construct bypass channel from upstream to down stream, and downstream to upstream excluding connections to Willow Brook at east and west ends of project.*



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2. *Construct temporary cofferdam within Willow Brook to facilitate the construction of the energy dissipator and cap using temporary sand bags or other effective structure. Bypass pump stream flow to Main Street culvert during construction of dissipator and cap.*
3. *Excavate stream channel sediment necessary to allow construction on dissipator and cap within the limits defined in the drawings. Install geotextile and 9-inch organic soil layer as detailed and to the grades necessary to construct the 27-inch intermediate riprap dissipator and related flat apron scour protection to the dimensions and elevations shown.*
4. *Upon completion of the dissipator and cap, remove the temporary cofferdam and allow the brook to flow over the newly constructed structures.*
5. *Finalize tie-in to by-pass channel to facilitate bypass of Willow Brook.*

**Dust Control**

*LEA has reviewed the dust control plan developed specifically for this project. More specifically we have further evaluated the action level of  $10 \text{ mg/m}^3$  particulate concentration. The proposed action level represents the lower of the Occupation Health and Safety Administration (OSHA) permissible exposure level (PEL) of  $15 \text{ mg/m}^3$  and the National Institute of Occupational Safety and Health (NIOSH) recommended exposure limit (REL) of  $10 \text{ mg/m}^3$  for nuisance dust. Both of which are based on an 8-hour time weighted average measurement. We are proposing to take corrective actions in the event a single instantaneous measurement exceeds the  $10 \text{ mg/m}^3$  threshold, adding a potentially significant safety factor.*

*Particulate monitoring is proposed during the performance of work on the project, which could generate dust. As defined in the Dust Control Plan, particulate monitoring will be performed by walking the perimeter of the project area with a portable particulate monitor at a frequency of once per day when: 1) precipitation has not occurred during the previous 24 hours; and 2) when work is being performed at the site. Dust monitoring will be performed on a more frequent basis if the above monitoring indicates an exceedance of the  $10 \text{ mg/m}^3$  standard for the project. Weekend particulate monitoring will be performed if needed, based on forecasted weather conditions and site conditions. The monitoring program proposed in the Dust Control Plan will be implemented on weekends or off workdays if dry and windy weather conditions are forecasted. Control measures, as defined in the Plan, will be implemented at any time if particulate monitoring indicates an exceedance of the  $10 \text{ mg/m}^3$  standard.*

*It should be noted, the intent of the Dust Control Plan for this project is to mitigate the opportunity for dust generation during both working and non-working periods. The use of windscreens, polyethylene sheet covers, dust suppression chemicals and water misting measures will be implemented as needed to proactively mitigate dust generation.*



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### **Excavation of Sediment in the Vicinity of Location ID WT-SD-47**

*Sediment sample WT-SD-47 is located along the northeastern bank of upper Willow Pond. The analytical data for this location exhibits elevated levels of SVOCs relative to other locations within the pond limits. Although a pond cap is proposed within this particular location, in response to the concerns raised, the location of this sample will be excavated, regardless of PCB concentrations, prior to the construction of the cap.*

### **Sediment Accumulation in Manholes and Catch Basins**

*There are several hundred individual catch basins present at the Pratt & Whitney East Hartford facility. The P&W East Hartford facility has a catch basin and manhole maintenance program that has been in place as part of the Stormwater Pollution Prevention Plan for the facility since at least 1995. As part of this program, catch basins at the site are periodically inspected to ensure that accumulations of sediment, sheen, or floating scum are not present and the catch basins or manholes are properly functioning. In the event accumulations of sediment are noted within a given catch basin or manhole, the condition is noted and Wethersfield Sweeping, a contractor to P&W, is notified of the condition and accumulated sediment within the catch basin or manhole is evacuated. The records of the inspections and the evacuation activities are maintained on file at P&W and are available for inspection. As a result of this program, we are confident that those stormwater outfalls that discharge to Willow Brook and Willow Brook Pond have been and will continue to be routinely inspected and accumulated sediment will be removed.*

We hope that the above responses adequately address your comments and meet with your satisfaction. If the methods for performing dust control monitoring on weekends and off work days are acceptable to the Department, we will make appropriate revisions to the Dust Control Plan and forward to you for incorporation in the project file. As we have indicated on numerous occasions, UTC is fully committed to the implementation of this project during 2001 construction season. Your concurrence with the approach set forth in the Remedial Action Work Plan is an essential element to the recognition of this goal. Should you have any further questions or comments, please do not hesitate to contact Lauren Levine of UTC at (860) 728-6520 or me.

Sincerely

**LOUREIRO ENGINEERING ASSOCIATES, INC.**

Brian A. Cutler, P.E.  
Vice President



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cc: Lauren Levine, UTC  
[REDACTED]  
Kim Tisa, U.S. EPA  
Ernest Waterman, U.S. EPA  
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